

## Subpart D—General Authorized Access

### § 96.33 Authorization.

(a) Any party meeting the requirements set forth in § 96.5 is eligible to operate a CBSD on a General Authorized Access basis.

(b) CBSDs used for General Authorized Access must register with the SAS and comply with its instructions.

EFFECTIVE DATE NOTE: At 80 FR 36222, June 23, 2015, § 96.33 was added, however, paragraph (b) contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

### § 96.35 General authorized access use.

(a) General Authorized Access Users shall be permitted to use frequencies assigned to PALs when such frequencies are not in use, as determined by the SAS.

(b) Frequencies that are available for General Authorized Access Use shall be made available on a shared basis.

(c) General Authorized Access Users shall have no expectation of interference protection from other General Authorized Access Users operating in accordance with this part.

(d) General Authorized Access Users must not cause harmful interference to and must accept interference from Priority Access Licensees and Incumbent Users in accordance with this part.

(e) General Authorized Access Users operating Category B CBSDs must make every effort to cooperate in the selection and use of available frequencies provided by an SAS to minimize the potential for interference and make the most effective use of the authorized facilities. Such users shall coordinate with an SAS before seeking station authorization, and make every effort to ensure that their CBSDs operate at a location, and with technical parameters, that will minimize the potential to cause and receive interference among CBSDs. Operators of CBSDs suffering from or causing harmful interference are expected to cooperate and resolve interference problems through technological solutions or by other mutually satisfactory arrangements.

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## Subpart E—Technical Rules

### § 96.39 Citizens Broadband Radio Service Device (CBSD) general requirements.

This section applies to all CBSDs. Additional rules applicable only to Category A or Category B CBSDs are set forth in §§ 96.43 and 96.45.

(a) *Geo-location and reporting capability.* (1) All CBSDs must be able to determine their geographic coordinates (referenced to the North American Datum of 1983 (NAD83)) to an accuracy of  $\pm 50$  meters horizontal and  $\pm 3$  meters of elevation. Such geographic coordinates shall be reported to an SAS at the time of first activation from a power-off condition.

(2) For professionally installed CBSDs, geographic coordinates to the same accuracy specified in paragraph (a)(1) of this section may be determined and reported to the SAS as part of the installation and registration process. Geographic coordinates must be determined and reported each time the CBSD is moved to a new location.

(3) A non-professionally installed CBSD must check its location and report to the SAS any location changes exceeding 50 meters horizontal and  $\pm 3$  meters elevation from its last reported location within 60 seconds of such location change.

(b) *Operability.* All CBSDs must be capable of two-way operation on any authorized frequency assigned by an SAS. Equipment deployed by Grandfathered Wireless Broadband Licensees during their license term will be exempt from this requirement.

(c) *Registration with SAS.* A CBSD must register with and be authorized by an SAS prior to its initial service transmission. The CBSD must provide the SAS upon its registration with its geographic location, antenna height above ground level (in meters), CBSD class (Category A/Category B), requested authorization status (Priority Access or General Authorized Access), FCC identification number, call sign,

user contact information, air interface technology, unique manufacturer's serial number, sensing capabilities (if supported), and additional information on its deployment profile required by §§ 96.43 and 96.45. If any of this information changes, the CBSD shall update the SAS within 60 seconds of such change, except as otherwise set forth in this section. All information provided by the CBSD to the SAS must be true, complete, correct, and made in good faith.

(1) A CBSD must operate at or below the maximum power level authorized by an SAS, consistent with its FCC equipment authorization, and within geographic areas permitted by an SAS on the channels or frequencies authorized by an SAS.

(2) A CBSD must receive and comply with any incoming commands from its associated SAS about any changes to power limits and frequency assignments. A CBSD must cease transmission, move to another frequency range, or change its power level within 60 seconds as instructed by an SAS.

(d) *Signal Level Reporting.* A CBSD must report to an SAS regarding received signal strength in its occupied frequencies and adjacent frequencies, received packet error rates or other common standard metrics of interference for itself and associated End User Devices as directed by an SAS.

(e) *Frequency reporting.* If directed by the SAS, a CBSD that receives a range of available frequencies or channels from an SAS must promptly report to the SAS which of the available channels or frequencies it will utilize.

(f) *Security.* CBSDs shall incorporate security measures sufficient to ensure that they are capable of communicating only with SASs operated by approved SAS Administrators, and that communications between CBSDs and SASs, between individual CBSDs, and between CBSDs and End User Devices are secure to prevent corruption or unauthorized interception of data.

(1) For purposes of obtaining operational limits and frequency availabilities and their updates, CBSDs shall only contact SASs operated by SAS Administrators approved by the Commission in accordance with subpart F of this part.

(2) All communications between CBSDs and SASs must be transmitted using secure methods that protect the systems from corruption or unauthorized modification of the data.

(3) Communications between a CBSD and its associated End User Devices for purposes of obtaining operational power, location, and frequency assignments shall employ secure methods that protect the system from corruption or unauthorized modification of the data.

(g) *Device security.* All CBSDs and End User Devices must contain security features sufficient to protect against modification of software and firmware by unauthorized parties. Applications for certification of CBSDs and End User Devices must include an operational description of the technologies and measures that are incorporated in the device to comply with the security requirements of this section. In addition, applications for certification of CBSDs and End User Devices must identify at least one of the SAS databases operated by an approved SAS Administrator that the device will access for channel/frequency availability and affirm that the device will conform to the communications security methods used by such databases.

(h) *Airborne operations.* Airborne operations by CBSDs and End User Devices are prohibited.

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#### § 96.41 General radio requirements.

The requirements in this section apply to CBSDs and their associated End User Devices, unless otherwise specified.

(a) *Digital modulation.* Systems operating in the Citizens Broadband Radio Service must use digital modulation techniques.

(b) *Conducted and emitted power limits.* Unless otherwise specified in this section, the maximum conducted output power, maximum transmit antenna gain, maximum EIRP, and maximum Power Spectral Density (PSD) of any